Pest Update (October 6, 2010)

Vol. 8, no. 29

John Ball, Forest Health Specialist, Extension Forester

Email: john.ball@sdstate.edu

Phone: 605-688-4737

Samples sent to: John Ball

Horticulture, Forestry, Landscape and Parks Rm 201, Northern Plains Biostress Lab

North Campus Lane

South Dakota State University Brookings, SD 57007-0996

Note: samples containing living tissue may only be accepted from South Dakota. Please do <u>not</u> send samples of dying plants or insect from other states. If you live outside of South Dakota and have a question, please send a digital picture of the pest or problem instead. **Walnut samples may not be sent in from any location – please provide a picture instead**.

Available on the net at:

http://sdda.sd.gov/Forestry/Educational-Information/PestAlert-Archives.aspx

Any treatment recommendations, including those identifying specific pesticides, are for the convenience of the reader. Pesticides mentioned in this publication are generally those that are most commonly available to the public in South Dakota and the inclusion of a product shall not be taken as an endorsement or the exclusion a criticism regarding effectiveness. Please read and follow all label instructions and the label is the final authority for a product's use on a particular pest or plant. Products requiring a commercial pesticide license are occasionally mentioned if there are limited options available. These products will be identified as such but it is the reader's responsibility to determine if they can legally apply any product identified in this publication.

In this issue	pg
Current concerns	
Fall color change on arborvitae foliage	2
E-sample	
Melampsora rust on cottonwoods	2
Russeting on apples	
Samples received	
Faulk County (spruce needleminer)	3
Gregory County (honeylocust pod midge?)	3
Jones County (dothistroma needle blight)	
Yankton County (Scots pine decline)	

Current concerns



Fall color is occurring on arborvitae along with the other evergreens. Pines and spruce have their older needles turn yellow (or sometimes brown) before falling. Usually this normal fall needle drop is easy to tell as it is the interior needles that are coloring and dropping. Arborvitae normally have the yellowing occurs a random spots, almost ribbons, of yellowing foliage throughout the entire plant. I have received several samples of normal foliage

color change on arborvitae from concerned homeowners wondering if their tree is diseased. This is normal.

E-samples



Some years I receive a rash of samples of a particular problem all within a short time period and this is true for Melampsora leaf rust. The disease can be a common one though we often go a few years without seeing much of a problem then it suddenly appears again. The first indicator of the disease is the bright orange and yellow urediospores that form on the underside of the leaves. If you look close you can

see them in this picture. Trees that are heavily infected will often have premature leaf drop with only the outer and upper most leaves remaining by early autumn. This is an interesting disease in that it requires two hosts, the cottonwood and an alternate host, a conifer and the two do not need to be close as the spores can be carried very long distances. Cottonwoods may also produce spores that infect other cottonwoods. The primary control is the use of resistant cultivars. Siouxland was a poplar one, but has been discarded due to its susceptibility to canker disease.



I received this picture of an apple with russets. Russeting is the formation of corky layers, rough and discolored, on the surface of the fruit, sometimes in networks of fine threads and blotches. It usually affects the epidermal cells so it does not affect the flavor of the fruit. There are several possible causes for this to occur on an apple from late frosts, bacteria and

fungi (particularly if the weather was cool and wet in early summer) and even mites and mildew. Pesticides can also be responsible. Usually in South Dakota the problem is weather related, either a late frost or a period of wet weather about 30 days after full bloom. Nothing can be done to treat this type of russetting and he is not likely to see it as bad next year.

Samples received

Faulk County spruce trees?

What is the problem with these

Usually with spruce it is not one problem but several and often only one will appear in the sample. I could not find any signs or symptoms of needle diseases in the sample but I cannot rule out cankers such as cytospora contributing to the decline of these trees. I was able to find spruce needleminers on the sample. This is a small worm-like larvae that webs clusters of needles together to create a nest (hence the needle loss). The best control of this insect is a high-pressure stream of water to dislodge the insects. Please send a picture, if possible, of the trees so I can see what else might be occurring.

Gregory County

What is causing the cupping of these

honeylocust leaves?

This may be due to the honeylocust pod midge. This insect will cause the leaflets to cup and curl. However, usually there are also some small podlike galls in place of the leaflets and I could find none on the sample. The other possibility is herbicide injury. Honeylocust are sensitive to drift from a number of herbicides including Milestone. Were there any herbicides used in the vicinity this summer?

Jones County What might be wrong with these pines? The interior needles are turning color but there is also some discoloration on the new needles.

Nothing ever said only one problem with a tree at a time! You are correct that the interior yellowing is the normal needle drop that occurs at this time of year. However the banding on the new needles is due to the fungal disease dothistroma. This is a common foliage disease of pines in the southern part of our state. It can be managed with spring applications of a copper fungicide applied as the new growth expands in the spring with a second application made in late June.

Yankton County this Scots pine tree?

What is causing the discoloration of

Nothing showed up on the sample. I'll have to stop and look at the tree this fall.